

in reciprocal movement of the slide plate for reasons which will be discussed hereinafter. A motor 37 provides for rotation of the disk 36.

At the opposite end of the cut away portion of the slide plate there are defined engaging edges 38 and 40. The pair of edges 38 are beveled to provide relatively blunt pusher ends 42. As shown in FIGURE 8, these ends 42 are approximately as thick as a record blank 16.

The engaging edge 40 is also beveled, but a relatively narrow end 44 is provided on this edge. This sharper edge forms a separating means which is adapted to move under the stack of records piled over the record being pushed by the edges 38.

The bottom ends 46 of the front pair of pillars 12 are adapted to extend into the space defined between the plates 10 and 20. These ends are spaced from the plate 20 a distance slightly greater than the thickness of a single record blank, but less than the thickness of two record blanks. Accordingly, a single blank is free to be moved beneath these front pillars when pushed by the slide plate. The spacing also permits removal of blanks from the magazine which are slightly warped but which otherwise are perfectly capable of providing a satisfactory recording.

Grooves 47 are cut in the pillars 12 and are adapted to receive C-shaped spacer plates 49 which are connected to the plate 10 by means of screws 51. These spacer plates hold the pillars 12 in position with respect to the plate 10. One or more C-shaped shims 53 can be inserted as shown to provide minute adjustments of the space between the ends 46 of the pillars and the plate 10.

The cut out edge 48 of the plate 20 defines a curve corresponding to a record blank 16. Accordingly, movement of a record blank by the slide plate from the magazine formed by the plate 10 will enable the blank to clear the plate 20. However, a pair of release mechanisms 50 are provided in order to prevent the blank from dropping downwardly as soon as it clears the plate 20. The release mechanisms (best shown in FIGURE 5) include drop plates 52 which are slidable in spaces formed between the mounting plate 10 and thin plate members 54 secured to the mounting plate by means of bolts 56. The drop plates 52 receive knobs 58 formed in the ends of crank arms 60 of the cranks 62. Pivoting of the cranks about the fulcrums 64 transmits reciprocal movement to the drop plates 52. Tension springs 65 normally bias the drop plates to a position blocking the opening in the bottom of the construction.

Pivotal movement of each of the cranks 62 results from engagement of the crank arms 66 with abutment means 68 fastened to a cross member 70. This cross member is disposed for vertical movement on a pair of posts 72 mounted on the plate 10. A drive disk 74, which is adapted to be rotated through operation of motor 76, includes a pin 78 which rides in a slot 80 formed in the cross member 70. Rotation of the disk and the action of the pin 78 imparts vertical movement to the cross member 70, this movement being confined by the post 72.

A centrally located, out-turned member 82 is formed on the cross member 70. A vertically disposed spindle rod 84 passes through the out-turned member and through a sleeve 86 secured to the rod. The out-turned member 82 engages the sleeve 86 during vertical upward movement of the cross member 70 thereby raising the rod 84. A spring 88 is located between the member 82 and a second sleeve 90 secured at a lower point on the rod 84. FIGURE 1 illustrates the rod position with the cross member 70 raised, and FIGURE 5 shows these means in a lowered position.

The rod 84 is centrally located with respect to record blanks when they are disposed over the opening which is defined in part by the edge 48 of the plate 20 (see FIGURES 2 and 12). Disposed beneath the opening

is a turntable 92 upon which the record blanks rest during recording. A drive pin 94 on the surface of the turntable is adapted to be inserted in one of the openings 96 in the record blank to provide for rotation of the blank with the turntable. A recessed guide pin 98 on the turntable is adapted to receive the tapered end 100 of the rod 84 when the rod is lowered. The end 100 is preferably not in direct contact with the pin 98 in order to provide driving clearance during recording.

In the illustrated mechanism a record blank is adapted to be cut in the first stage of the cycling so that there is no delay for placing a blank in position on the turntable. Accordingly, in the explanation of the operation, it will be assumed that a record blank is in position on the turntable 92. Furthermore, a stack of record blanks is provided in the magazine defined between pillars 12 and 13 and by the annular wall 14. The unit ordinarily operates as a vending machine and, accordingly, the parts thereof are adapted to function when the proper amount of money has been inserted in the machine.

Once the vending condition is realized, a recording arm (not shown) is adapted to move over the blank on the turntable 92 to cut a record while an individual speaks into a microphone. When the recording is completed, the motor 76 operates to rotate the disk 74 and the cross member 70 is, therefore, raised. When the out-turned member 82 on the cross member contacts the sleeve 86, the rod 84 is raised away from the guide pin 98 and clearance is therefore provided for removal of the record blank from the turntable.

Continued movement of the disk 74 raises the rod 84 so that the end 100 thereof is moved above the record blank shown in dotted lines in FIGURE 5. The motor 76 then stops whereby the rod 84 is held in position until the next record blank is moved beneath it.

The next record blank is positioned through operation of motor 37 which provides for rotation of disk 36. Through engagement of the pins 34 on the disk 36 with the teeth 30, the sliding plate 22 is moved and the pusher edges 38 engage the blank located on the floor of the magazine. Due to the spacing of the ends 46 on the pillars 12 from the plate 10, only a single blank can be moved out of the magazine at one time.

The beveled edges 38 and 40 cooperate to provide for separation of the lower blank from an adjacent blank. These bevels extend completely across the rearward end of the blank and any sticking of adjacent records can be overcome whereby the possibility of the mechanism failing to deliver a blank is greatly minimized.

The leading end of the blank is adapted to engage switch 102 when it reaches a position beneath the rod 84 and the motor 37 stops at this time. With the blank in this position, the central opening 104 therein will be located whereby lowering of the spindle rod 84 will result in movement of the end 100 thereof through this opening. The switch 102 serves as a means for insuring proper operation of the machine, since the operation of the motor 76 will not be initiated until this switch is actuated. Accordingly, if a record blank is not moved into the proper position by the slide 22 for ultimate transfer to the turntable 94, the machine will not operate to complete any further steps in the cycle. Preferably an "out of order" or "empty" signal will appear on the face of the machine at this time. As a further precaution in insuring proper operation of the machine, an empty switch 106 is disposed in the magazine. This resiliently mounted switch will remain closed as long as a record in the magazine presses against it. However, when the supply of records is exhausted, or if the records hang up in the magazine, the switch will open and further steps in the operation cannot be initiated until the condition is corrected.

When a record blank is properly moved into position it will not drop down due to the holding action of drop plates 52. However, when the cross member moves down, the abutments 68 thereon engage the crank arms 66 where-